AMENDMENTS TO THE CLAIMS

Please amend claims as set forth below.

1. (Currently amended) A fuel cell optimum operating point tracking system used in a power source device powered by a fuel cell, configured so as to improve ~~the~~ a responsiveness thereof by monitoring ~~the~~ a power state ~~while varying the output voltage of said fuel cell, and by allowing said fuel cell to start operation at an input voltage corresponded to a maximum power point thereof~~, comprising:

~~a fuel cell maximum power search function; and~~

a fuel cell output power measuring unit capable of measuring the power state of the fuel cell; and

a fuel cell optimum operating point tracking ~~function~~ unit capable of tracking an optimum operating point ~~through maximum power monitoring, by allowing said fuel cell maximum power search function to operate so as to monitor the power state to thereby keep the~~, so that a power source operation is kept constant at a stable condition, wherein the fuel cell optimum operating point tracking unit finds the optimum operating point, ~~and additionally giving a minimal voltage change~~ by changing the power state of the fuel cell by a minimal value ~~at~~ from around ~~the~~ a current operating state ~~voltage value~~.

2. (Currently amended) The fuel cell optimum operating point tracking system as claimed in Claim 1, wherein the power state is an output voltage of said fuel cell, and the optimum operating point is a maximum power point of the fuel cell, and said fuel cell ~~maximum power search function~~ optimum operating point tracking unit comprises a fuel cell output voltage variation command unit capable of varying the output voltage of said fuel cell upon activation thereof up to as high as ~~the~~ maximum voltage for ~~the~~ maximum power point tracking control.

3. (Currently amended) The fuel cell optimum operating point tracking system as claimed in Claim 1, wherein ~~said fuel cell maximum power search function comprises~~ the power state is an output voltage of said fuel cell, and ~~a~~ the fuel cell output power measuring unit ~~capable of measuring~~ measures the ~~power state~~ output voltage of said fuel cell as the power state ~~by~~ while

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varying the output voltage upon activation thereof.

4. (Currently amended) The fuel cell optimum operating point tracking system as claimed in Claim 1, wherein said fuel cell ~~maximum power search function~~ optimum operating point tracking unit comprises a fuel cell maximum power point judging-and-storing unit capable of monitoring ~~the~~ an output power of said fuel cell upon activation thereof, and of judging the maximum power point of the output voltage of said fuel cell.

5. (Currently amended) The fuel cell optimum operating point tracking system as claimed in Claim 4, wherein said fuel cell maximum power point judging-and-storing unit is configured so as to judge ~~a voltage under which~~ the ~~command voltage~~ output power becomes a maximum ~~within a range of~~ in ~~the~~ a successive detection as the maximum power point, when the maximum power point is successively detected ~~despite said command~~ while the output voltage is varied.

6. (Currently amended) The fuel cell optimum operating point tracking system as claimed in Claim 1, wherein the power state is an output voltage of the fuel cell, and the optimum operating point is a maximum power point of the fuel cell, and wherein said fuel cell ~~maximum power search function~~ optimum operating point tracking unit comprises a timer having a specified voltage refreshing interval set therein, configured so as to measure the ~~power state~~ output voltage of the fuel cell by clearing, after ~~the~~ an elapse of said specified voltage refreshing interval, ~~the~~ stored values of ~~the fuel cell output voltage~~ the maximum power point and the output voltage corresponded thereto upon activation of said fuel cell, and by varying the output voltage of said fuel cell up to as high as the maximum voltage for ~~the~~ maximum power point tracking control.

7. (Currently amended) The fuel cell optimum operating point tracking system as claimed in Claim 1, wherein the power state is an output voltage of said fuel cell, and said fuel cell ~~maximum power search function~~ optimum operating point tracking unit comprises a power source activation detecting unit capable of detecting an activation of the power source device, and wherein the fuel cell output power measuring unit ~~measuring~~ measures the output voltage as the power state ~~by~~,

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while varying the output voltage of the fuel cell upon the activation thereof, up to as high as the maximum voltage for the maximum power point tracking control.

8. (Currently amended) The fuel cell optimum operating point tracking system as claimed in Claim 1, wherein said fuel cell maximum power search function optimum operating point tracking unit comprises an optimum operating point variation command unit capable of tracking the optimum operation point, by monitoring the power state at the a fuel cell output power maximum point upon activation of said fuel cell, and by effecting the maximum power monitoring through additionally giving a minimal voltage change at by changing the power state of the fuel cell by a minimal value from around the current operating voltage value state.

9. - 14. (Canceled)

15. (Currently amended) The fuel cell optimum operating point tracking system as claimed in Claim 1, further comprising an intermittent operation preventive function unit capable of monitoring, during the an operation of said power source device, the output voltage of the fuel cell, and of outputting an output interruption voltage, upon lowering of the fuel cell output voltage of the fuel cell to as low as the a fuel cell output interruption voltage or below, to thereby turn said power source device into interruption state.

16. (Canceled).

17. (Currently amended) The fuel cell optimum operating point tracking system as claimed in Claim 15, wherein said intermittent operation preventive function unit comprises a fuel cell output interruption judging unit capable of judging whether an output of the fuel cell should be is interrupted or not, when the fuel cell output voltage of the fuel cell drops to the fuel cell output interruption voltage or below during an operation of said fuel cell optimum operating point tracking function unit.

18. (Currently amended) The fuel cell optimum operating point tracking system as claimed in Claim 15, wherein said intermittent operation preventive ~~function~~ unit comprises a timer unit capable of controlling the intermittent operation when an output of the fuel cell is interrupted during operation of said fuel cell ~~optimum operating point tracking function~~ maximum power search unit.

19. (Currently amended) The fuel cell optimum operating point tracking system as claimed in Claim 18, wherein said timer unit is configured so as to interrupt said fuel cell, to set a restart wait time, to measure the output voltage of said fuel cell after ~~the~~ an elapse of the restart wait time, and to output an operation output signal if the output voltage reaches or exceeds ~~the~~ a restart voltage to thereby activate said fuel cell.

20. (Currently amended) The fuel cell optimum operating point tracking system as claimed in Claim 15, wherein said intermittent operation preventive ~~function~~ unit comprises a fuel cell output start judging unit capable of judging whether restart of the operation of the fuel cell interrupted during the operation of said fuel cell optimum operating point tracking ~~function~~ unit is allowable or not.

21. (Currently amended) The fuel cell optimum operating point tracking system as claimed in Claim 1, further comprising a fuel cell optimum operating point tracking and retaining ~~function~~ unit capable of widening ~~the~~ a specified voltage refreshing interval, when variation in the output voltage of said fuel cell falls below the amount of variation of set voltage within a predetermined time period.

22. (Canceled)

23. (Currently amended) The fuel cell optimum operating point tracking system as claimed in Claim 21, wherein said fuel cell optimum operating point tracking and retaining ~~function~~ unit comprises a fuel cell output voltage control value variation judging unit capable of judging whether the output voltage variation of said fuel cell falls below, or exceeding the amount of variation of set

voltage within a predetermined time period.

24. (Currently amended) The fuel cell optimum operating point tracking system as claimed in Claim 21, wherein said fuel cell optimum operating point tracking and retaining ~~function~~ unit comprises a timer unit capable of operating so as to activate said fuel cell optimum operating point tracking unit, by widening the specified voltage refreshing interval, if the output voltage variation of said fuel cell falls below the amount of variation of set voltage within a predetermined time period, and by initializing said specified voltage refreshing interval, if the output voltage variation of said fuel cell exceeds the amount of variation of set voltage within a predetermined time period.

25. (Currently amended) The fuel cell optimum operating point tracking system as claimed in Claim 21, wherein said fuel cell optimum operating point tracking and retaining ~~function~~ unit is configured so as to set a reference unit time, to count the number of times the output voltage variation of said fuel cell falls below said amount of variation of set voltage within every reference unit time, and to determine ~~the~~ a state of fall below the amount of variation of set voltage within said predetermined time period by the fact that a specified number of count has successively been met.

26. (Currently amended) The fuel cell optimum operating point tracking system as claimed in Claim 25, wherein said fuel cell optimum operating point tracking and retaining ~~function~~ unit comprises a counter capable of setting the reference unit time, and of counting ~~the fact~~ an event ~~that~~ in which the output voltage variation of said fuel cell falls below said amount of variation of set voltage within every reference unit time.

27. (Currently amended) A power source unit comprising the fuel cell optimum operating point tracking system as claimed in Claim 1, wherein said fuel cell optimum operating point tracking system ~~being~~ is used in ~~a~~ the power source device powered by ~~a~~ the fuel cell, configured so as to improve ~~the~~ responsiveness thereof by monitoring the power state while varying the output voltage of said fuel cell, and by allowing said fuel cell to start an operation at an input voltage

corresponded to a maximum power point thereof, comprising:

a said fuel cell maximum power search function unit; and a fuel cell optimum operating point tracking function capable of tracking an optimum operating point through maximum power monitoring, by allowing said fuel cell maximum power search function unit to periodically operate so as to monitor the power state to thereby keep the power source operation constant at a stable condition, and additionally giving a minimal voltage change at around the current operating voltage value.